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Oldenburg im Nordwesten e.V.

Energy Transition and Labour Market Information in the Regional Economic Area (Northwest Germany)

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Two Related Instituts for Economic Education with one Goal in the Northwest of Germany

The Mission: Promotion of Economic Education in General Schools

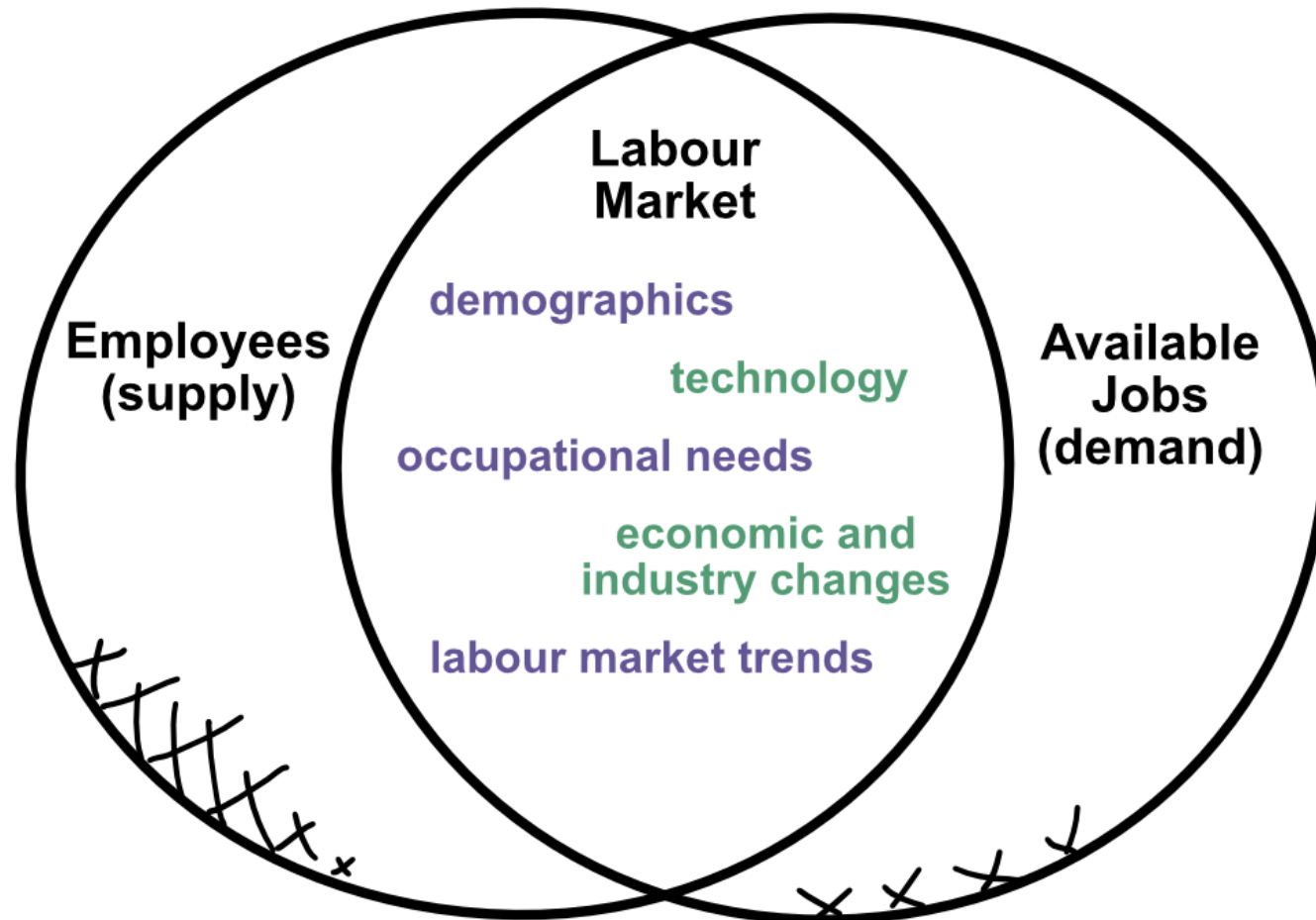
- Training of becoming Teachers (ca. 600 Students) at the University of Oldenburg
- Further Training of Teachers
- Common Research Projects, e g. on
 - Consumer Education
 - Financial Literacy
 - Economic Experiments
 - Economic Ethics
 - Entrepreneurship Education
 - Career Guidance



Thomas Pusch, Wikipedia



Labour Market Information (LMI) as an Important Topic in Economic Education



The regional economic area as a subject of economic education and career guidance

- Exemplary illustration of developments in the economic and working world
- Consideration of pupils' ideas
- Imparting knowledge about professions and career prospects
- Practical experience opportunities (e.g. expert interviews, work placements, company explorations)
- ...



Key Questions

- Why is the topic important for career guidance?
- How can students in schools get informed and interested in an apprenticeship in professions, which are relevant for the energy transition?
- What are the apprenticeship professions of outstanding regional relevance?



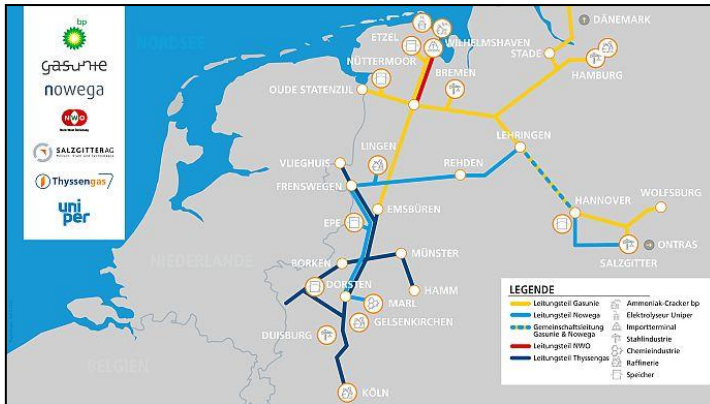
Starting Point: Specific demand for skilled workers in the energy transition in the Northwest Metropolitan Region



https://www.ndr.de/nachrichten/niedersachsen/oldenburg_ostfriesland/Zweites-LNG-Terminal-in-Wilhelmshaven-Baustart-im-Sommer-geplant,lng820.html



<https://www.sueddeutsche.de/wirtschaft/erneuerbare-energie-offshore-windparks-werden-immer-billiger-und-bringen-neue-risiken-1.3491886>



<https://www.gasunie.de/news/von-wilhelmshaven-zu-den-industriezentren-in-nrw-und-niedersachsen-unternehmensallianz-verbindet-projekte-fuer-wasserstoffimport--produktion--transport-und--verbrauch>

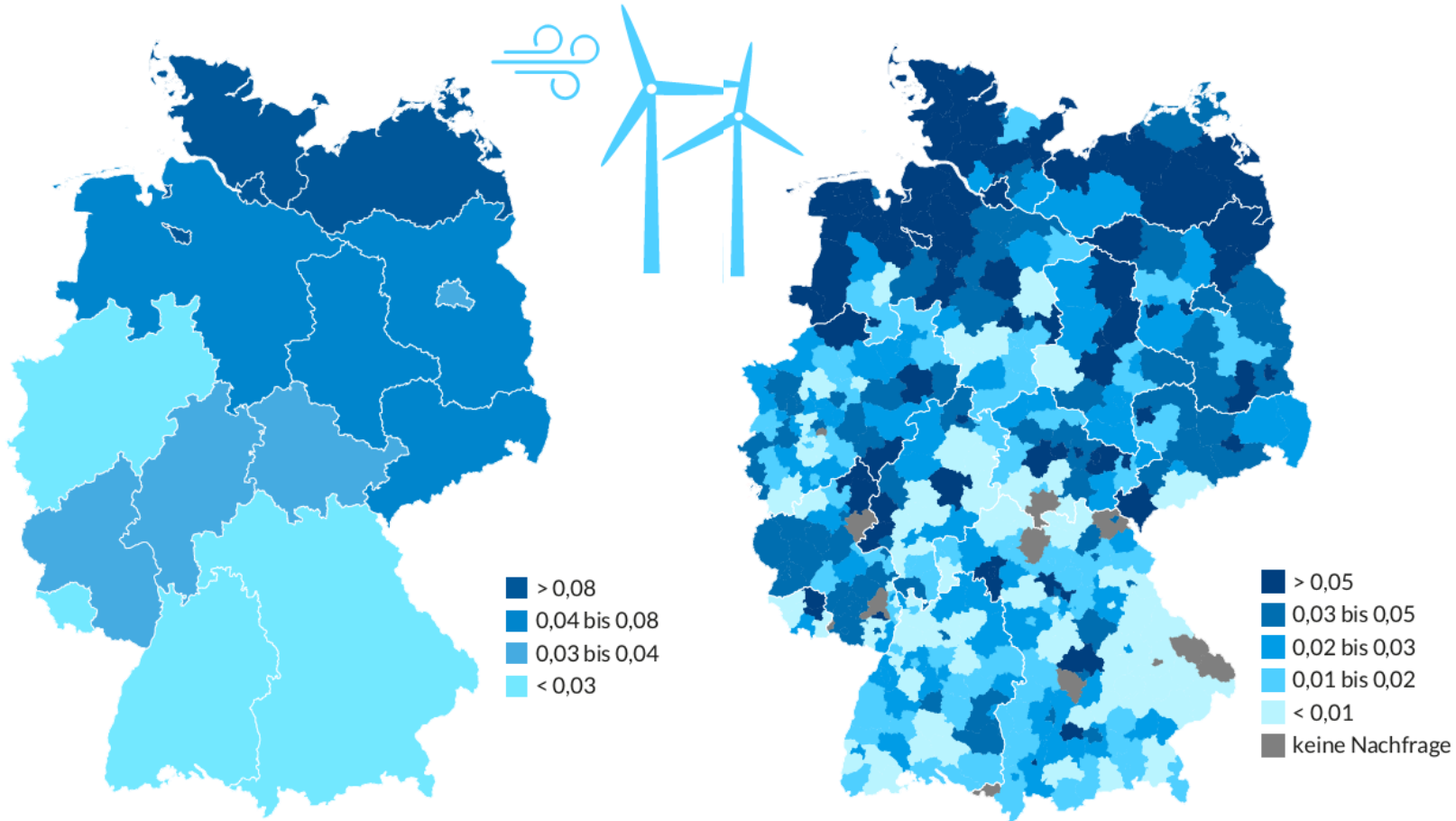
<https://www.metropolregion-nordwest.de/portal/seiten/interaktive-wasserstoffkarte-der-metropolregion-nordwest-900000250-10018.html>



Memory Note: Relevance for "traditional" companies

Example: Wind Energy

Percentage of online job postings per employee (subject to social security contributions)



Survey: Engler/Mertens/Neligan/Bakalis (2023)

(Lack of) Visibility in the Titles of Apprenticeship Professions



<div style="text-align: right;">Website</div> <div style="text-align: left;">Search Term</div>	<div style="text-align: center;">hochschulkompass.de</div> <div style="text-align: center;">Study Programs</div>	<div style="text-align: center;"> https://planet-beruf.de/schuelerinnen/welche-ausbildungen-gibt-es/welche-berufe-gibt-es/berufe-a-z/ </div> <div style="text-align: center;">Training Profession</div>
„Umwelt“ (Environment)	655	1
„Nachhaltigkeit“ (Sustainability)	279	0
„Energie“ (Energy)	760	1
„Elektr...“ (Electrical)	799	13
Basic Population	ca. 22.000	ca. 470

Project „Perspectives in the Metropolitan Region Nordwest – „Training with Energy“



- Funding: Metropolitan Region Nordwest
- Submission of Application: Wesermarsch Economic Development Corporation
- Project Implementation:
 - Institute for Economic Education gGmbH (IÖB) (affiliated institute of the University Oldenburg)
 - University Oldenburg, Technical Education Working Group (ATB)
- Duration: August 2024 - July 2026

Objectives and Target Groups

- Supporting pupils, especially at general education schools, in their vocational orientation
 - General focus: fundamental relevance for the world of work and employees, focused on the regional economic area
 - Special focus: particularly relevant apprenticeship professions
- Supporting companies in the recruitment of trainees and supporting the development of the Northwest Metropolitan Region
- Support for teachers and training staff in companies and inter-company training institutions in organizing practical contacts
- Support for subject teachers, especially in business and STEM subjects
- Transfer and Continuation

Work Packages

1. Development of interactive learning/teaching materials
2. Project website for the provision of learning/teaching materials, handouts for trainers and teachers, videos with interviews with experts
3. Qualification of teachers (and trainers) - in cooperation with companies
4. Ongoing evaluation, e. g.
 - **Survey of the most relevant apprenticeship professions in the Northwest Metropolitan Region**
 - Student and teacher's beliefs related to green working life and professions
5. Continuation and transfer, e.g. by means of networking conferences and publications

Didactic Approach



State of Research

Studies already exists focusing

- apprenticeship professions, advanced training professions, study professions in general (iwd 2022)
- professions with a big gap for the political purposes energy transition and railway traffic (prognos 2023)
- labour demand for wind and solar energy (KOFA 2023) - also with a regional focus (Fingerhut/Mertens/Herdin 2023).
- “Greenes” of professions with a regional focus (Janser 2023; Brixy/Janser/Mense 2023)
- jobs and professions around renewable energy worldwide (IRENA and ILO 2023)

Research gap: (Training) professions with particular relevance in the Northwest Metropolitan Region



Survey of the most relevant training professions in the Northwest Metropolitan Region



- **Objective:** Identification of apprenticeship professions that are particularly relevant in the metropolitan region and its districts.
- **Target group:** Experts with a macro perspective on the labor market, especially in chambers, employment agencies, business development agencies and inter-company educational institutions
- **Methodological approach:** written, largely standardized survey (with Unipark)
 - Pre-selection (exclusion of around 200 professions) in the pre-test by experts from the Federal Employment Agency of Lower Saxony and the Northwest Metropolitan Region
 - Assessment of the relevance of around 150 training occupations in eight occupational fields (based on the classification of the Federal Employment Agency)
 - Dissemination with the help of the metropolitan region (coordinating an expert group for labour market topics)

Occupational Fields

Construction,
Architecture,
Surveying

roofer
carpenter

Electrical

electrician

IT, Computers

IT specialist

Agriculture,
Nature,
Environment

farmer
gardener

Metal,
Mechanical
Engineering

Mechatronics
technician

Natural
Sciences

laboratory
technician

Production,
Manufacturing

cook

Technology,
Technology
Fields

metal worker

Services

Healthcare

Art, Culture,
Design

Media

Social Affairs,
Education

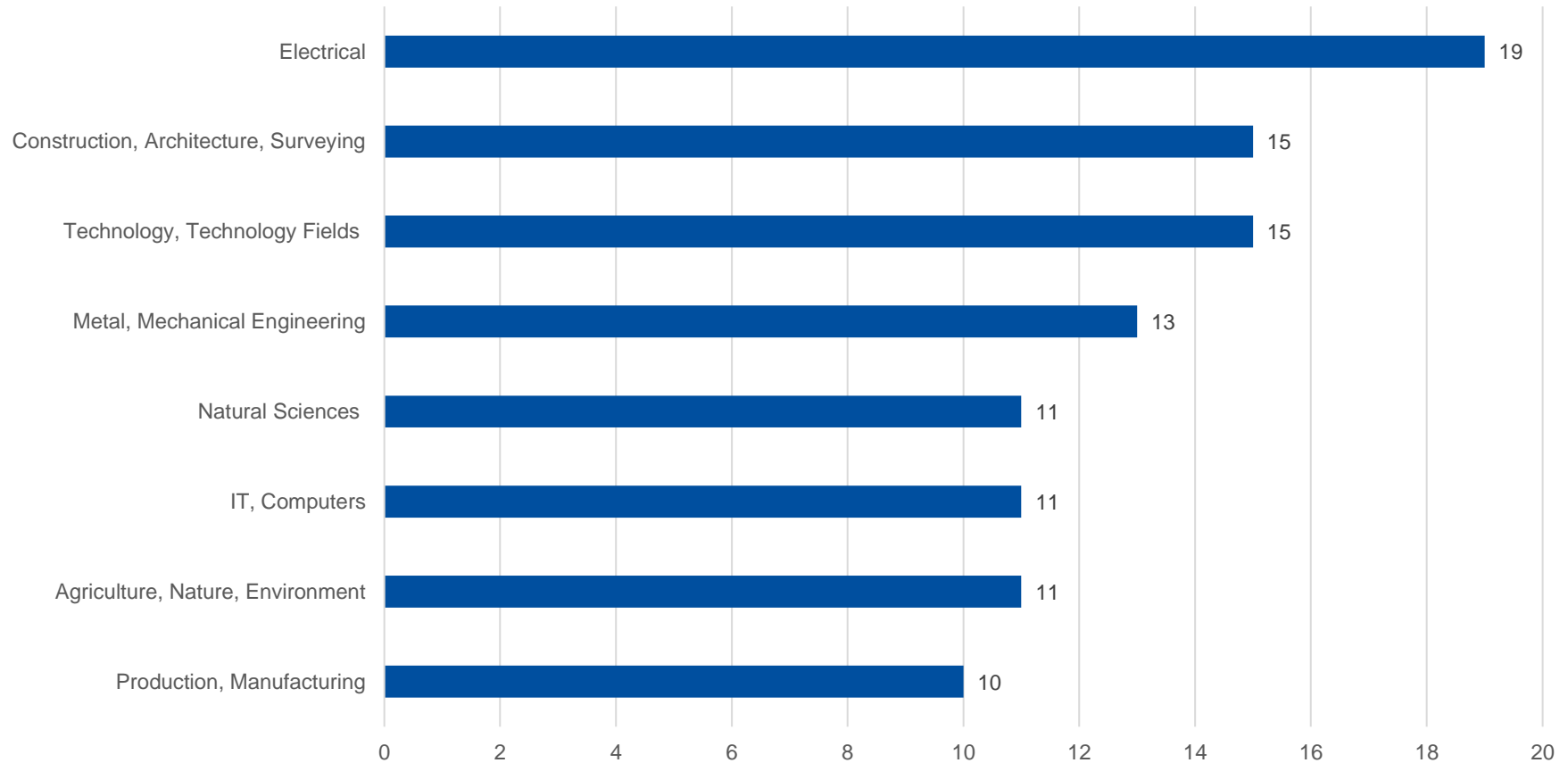
Transport,
Logistics

Economy,
Administration

Occupational Fields

Please first select the occupational fields in which you see professions relevant to the energy transition (multiple answers are possible).

First preliminary results, the survey has not yet been finalized!



*First preliminary
results, the survey
has not yet been
finalized!*

Most relevant apprenticeship professions

- Farmer
- Electrical fitter
- Painter and lacquer worker
- IT systems electronics engineer
- Road and traffic technology specialist
- Electronics engineer for facility and infrastructural systems
- Electronics engineer for electrical and building services engineering
- Plant mechanic for sanitary, heating and air conditioning technology
- Agricultural and construction machinery mechatronics technician
- Electronics engineer for automation and system engineering
- Specialist – recycling and waste management
- Specialist in wastewater technology
- Water management specialist
- Mechatronics engineer
- Roofer

To be continued...

- Expert workshop: discussion of the results, agreement on professions of particular importance
- Supplementary qualitative interview studies with experts with a macro perspective on the labor market, but also on the level of individual companies
- Teacher and student perception study to sound out the initial prerequisites and prior knowledge in the sense of didactic reconstruction according to Kattmann et al. (1997)
→ to be included in the design of the teaching materials in addition to scientific reference
- Design of teaching materials (probably with a focus on the fields Electrical, Construction/Architecture/Surveying, Technology/Technology Fields as well as Metal/Mechanical Engineering)
- Conception of training programmes for teachers and other stakeholders





THANK YOU!

We look forward to your questions!

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[566407/?gad_source=1&qclid=EAlaIqobChMIwarKo575hgMVMTCGAB2GwwztEAAAYASAAEgIBo_D_BwE](https://www.iwd.de/artikel/fachkraefte-fuer-die-energiewende-566407/?gad_source=1&qclid=EAlaIqobChMIwarKo575hgMVMTCGAB2GwwztEAAAYASAAEgIBo_D_BwE) [26.06.2024].

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